Course Syllabus

PHYS271
General Physics Laboratory II
Spring 2026

Dr. Kara Hoffman, faculty advisor, and Dr. Matt Severson
kara@umd.edu (mailto:kara@umd.edu) , mseverso@umd.edu (mailto:mseverso@umd.edu)
Office hours by appointment

ALL sections meet in PHYS271 lab room, PHY 3213
There is no lecture-like component to this lab course
TAs proctor all lab sessions

ALL in-person lab sections meet in PHYS271 lab room, PHY 3213.

Sec	Lab time	TA	email	ExpertTA class registration link
101	M 9:00-11:50am	Reshma Ravi	rravi125@umd.edu	https://reg.theexpertta.com/USH22MD-B0CFE9-311 (https://reg.theexpertta.com/USH22MD-B0CFE9-311)
102	W 8:00-10:50am	Daniil Ivannikov	divannik@umd.edu	https://reg.theexpertta.com/USH22MD-7CB6D5-310 (https://reg.theexpertta.com/USH22MD-7CB6D5-310)
103	M 3:00-5:50	Paulo Marques	paulomar@umd.edu	https://reg.theexpertta.com/USH22MD-8D1BC3 (https://reg.theexpertta.com/USH22MD-8D1BC3-30Z)

104	Tu 8:00-10:50am	Reshma Ravi	rravi125@umd.edu	https://reg.theexpertta.com/USH22MD-2AA881-30Y (https://reg.theexpertta.com/USH22MD-2AA881-30Y)
105	M 6:00-8:50pm	Abdulrahman Albishri	albishri@umd.edu	https://reg.theexpertta.com/USH22MD-693957-30X (https://reg.theexpertta.com/USH22MD-693957-30X)
106	Tu 11:00am-1:50pm	Abdulrahman Albishri	albishri@umd.edu	https://reg.theexpertta.com/USH22MD-82B763-30W (https://reg.theexpertta.com/USH22MD-82B763-30W)
107	Tu 4:00-6:50	Reshma Ravi	rravi125@umd.edu	https://reg.theexpertta.com/USH22MD-DB7C45-30V (https://reg.theexpertta.com/USH22MD-DB7C45-30V)
108	W 6:00-8:50pm	Paulo Marques	paulomar@umd.edu	https://reg.theexpertta.com/USH22MD-794BA9-30U (https://reg.theexpertta.com/USH22MD-794BA9-30U)
109	Th 1:00-3:50pm	Tigest Shibesi	shibeshi@umd.edu	https://reg.theexpertta.com/USH22MD-8EABBD-30T (https://reg.theexpertta.com/USH22MD-8EABBD-
110	W 2:00-4:50pm	Tigest Shibesi	shibeshi@umd.edu	https://reg.theexpertta.com/USH22MD-85E74C-30S

				(https://reg.theexpertta.com/USH22MD-85E74C-30S)
111	Th 9:00-11:50am	Abdulrahman Albishri	albishri@umd.edu	https://reg.theexpertta.com/USH22MD-BF71C6-30R (https://reg.theexpertta.com/USH22MD-BF71C6-30R)
112	Th 4:00-6:50pm	Daniil Ivannikov	divannik@umd.edu	https://reg.theexpertta.com/USH22MD-3064C8-30Q (https://reg.theexpertta.com/USH22MD-3064C8-30Q)
113	Th 7:00-9:50pm	Paulo Marques	paulomar@umd.edu	https://reg.theexpertta.com/USH22MD-62A268-30P (https://reg.theexpertta.com/USH22MD-62A268-30P)
114	Tu 7:00-9:50pm	Daniil Ivannikov	divannik@umd.edu	https://reg.theexpertta.com/USH22MD-DC5EDC-30O (https://reg.theexpertta.com/USH22MD-DC5EDC-30O)
115	M 12:00-2:50pm	Tigest Shibesi	shibeshi@umd.edu	https://reg.theexpertta.com/USH22MD-EE2131-30N (https://reg.theexpertta.com/USH22MD-EE2131-30N)

NOTE: Details in this syllabus should be taken as tentative. I will notify you when changes are made.

IMPORTANT Notes on this course

To obtain credit for this PHYS271 laboratory course, you MUST complete ALL experiments and the Exam.

For engineering majors, this is ABSOLUTE. I.e. you will be given an F or an Incomplete if you do not have a submission for all experiments + the exam at the end. There are no exceptions.

Course Description

The 261-271 laboratory sequence gives a hands-on experimental introduction to classical and modern physics intended for students studying engineering or other similarly mathematical sciences. This second course in the sequence will consist of experiments in Electro and magnetostatics, capacitors, circuits, optics, and modern physics.

Required pre-requisites: PHYS161, PHYS261 (Mandatory),
PHYS260 (may be taken as co-req under exceptional circumstances, with permission)
If you are signed up for this course and have NOT completed the pre-requisites, please contact me as soon as possible.
Co-requisite: PHYS270 (Generally mandatory for (non-bio) engineering majors)

Required Textbook: The correct version of the Phys 271 lab manual for this course is available only through the Expert TA web system (see below).

Expert TA
You will need to sign up for ***The Expert TA*** in order to access the lab manual AND to complete the ***required weekly pre-lab exercises*** through their online system. The initial access code with link for your section can be found in the Announcements on the course ELMS page.

Choosing the link for your section and group will initialize registration and then give you the opportunity to purchase course and manual access by credit card in the steps that follow. The cost of the access here replaces the cost of a physical lab manual.

Expert TA access codes can also be purchased at the Campus Book Store, with the addition of a small surcharge. To register with a code, go to theExpertTA.com and choose Student Registration at bottom right.

Grading Scheme

Pre-labs	**10%**
Experiment reports (9)	**70%**
Final exam	**20%**

Assignments

Pre-lab exercises
There are several pre-lab exercises associated with each experiment. These weekly assignments are found on the each Experiment page in the **ExpertTA** system. **Pre-labs are due before class begins**

and must be submitted prior to class start time for full credit.

Experiment Reports
You must complete the Excel lab spreadsheet for each of the 9 experiments in order to receive credit for the course. Experiments are conducted individually, and each student will complete and submit (on ELMS) a pre-fabricated Excel template spreadsheet containing all measurements, analyses, and answers to final questions. You may generally discuss the assignment with other students. The custom spreadsheet saving process will create a unique copy of completed work for individual submission. Completed assignments are submitted via upload to the ELMS page.

Exam
The final assignment for the course is an open source exam in ELMS, rather than a culminating lab. Exam will consist of short answer questions, some of which will be similar to those in pre-lab or experiment final questions; other questions will be more directly related to experimental or procedural aspects of the experiments.

Again, you MUST complete the Exam to receive credit for the course!

ELMS Posts and Communicating with Me

I will clearly post all announcements, assignments, due dates, and other important information on the course ELMS page. I will also use ELMS to send course-wide emails when necessary. ***It is your responsibility to find such information on ELMS.*** Please check the page regularly for updates. I will be rather inflexible in dealing with problems that arise due to your failure to know things that have been said on ELMS.

That said, the TA or I will be happy to answer any other questions about course material, trouble with assignments, etc as they arise. Please feel free to send me email at any time for such reasons.

Attendance, Religious Observances, and University Closures

Since all experiments (and the exam) must be completed to receive credit for the course, ***attendance is effectively mandatory. We are under no obligation to excuse your absence for weak or illegitimate reasons.***

If you need to miss an experiment or exam for a religious observance or other legitimate reason known at this time, please notify your TA in advance, and preferably ASAP.

If you miss due to illness or emergency, please contact your TA ASAP after the fact, and obtain documentation of the incident if possible.

In both cases, make-up for the experiment in question will be arranged accordingly, usually during designated make-up weeks.

If the university is closed due to new spread of covid, inclement weather, or some emergency situation, **I will contact you on ELMS with further instructions**. We will try to have as many of the scheduled in-person sessions as possible.

Academic Integrity

Performing physics experiments can be a difficult and tedious process; all students will work alone on the experiments, but discussion with neighbors for clarifications or confusion is encouraged. The spreadsheet saving process will create a unique copy of completed work for individual submission.

There are a number of security features in each spreadsheet to make the unique identification of your work nearly inevitable. I will have zero tolerance for submission of work you were not present to complete. Such behavior may result in an XF grade for the course and/or further action taken by the Student Honor Council.

Students with Disabilities

Accommodations will be provided to enable students with disabilities to participate fully in the course. Please discuss any needs with me at the beginning of the semester, so that appropriate arrangements can be made. Students who are registered with ADS and plan to take exam with accommodations should provide the pertinent authorization forms (electronic format is fine) at least one week prior to the exam date.

I will likely confirm all ADS letters en masse just prior to the exam, so don't worry if it doesn't happen sooner.

Course Summary:

Date	Details	Due
Fri Jan 30, 2026	**Syllabus Quiz (https://umd.instructure.com/courses/1401771/assignments/7493672)**	due by 5pm
Fri Feb 13, 2026	**Exp 1 (https://umd.instructure.com/courses/1401771/assignments/7493673)**	due by 11:59pm
Fri Feb 20, 2026	**Exp 2 (https://umd.instructure.com/courses/1401771/**	due by 11:59pm

Date	Details	Due
	assignments/7493674)	
Fri Feb 27, 2026	Exp 3 (https://umd.instructure.com/courses/1401771/assignments/7493675)	due by 11:59pm
Fri Mar 6, 2026	Exp 4 (https://umd.instructure.com/courses/1401771/assignments/7493676)	due by 11:59pm
Fri Mar 13, 2026	Exp 5 (https://umd.instructure.com/courses/1401771/assignments/7493677)	due by 11:59pm
Fri Apr 3, 2026	Exp 6 (https://umd.instructure.com/courses/1401771/assignments/7493678)	due by 11:59pm
Fri Apr 10, 2026	Exp 7 (https://umd.instructure.com/courses/1401771/assignments/7493680)	due by 11:59pm
Fri Apr 17, 2026	Exp 8 (https://umd.instructure.com/courses/1401771/assignments/7493681)	due by 11:59pm
Fri Apr 24, 2026	Exp 9 (https://umd.instructure.com/courses/1401771/assignments/7493682)	due by 11:59pm
	Exam (https://umd.instructure.com/courses/1401771/assignments/7493671)	
	ExpertTA avg (https://umd.instructure.com/courses/1401771/	

Date	Details	Due
	assignments/7493683)	